

PN - JP63228076 A 19880922  
 PD - 1988-09-22  
 PR - JP19860194378 19860820  
 OPD - 1986-08-20  
 TI - DIGITAL PERIOD MEASURING INSTRUMENT  
 AB - PURPOSE: To accurately measure the period of a signal without increasing a sampling frequency by detecting the zero point of the signal in sampling cycle units, and calculating a frequency error by using amplitude values at two points on both sides of the zero point of the signal. CONSTITUTION: A zero-cross detector 1 detects the zero point of the signal in sampling cycle units and resets a counter 2, so the value of the counter 2 right before the resetting indicates the length between zero points of the signal, i.e. a cycle while the sampling cycle is regarded as 1. The cycles of the signal measured by the counter 2 are in sampling cycle units, so they have an error as compared with real cycles and an error arithmetic circuit 3 calculates the error by using the amplitude values at the two points on both sides of the zero point, and a latch circuit 7 stores the error temporarily. There are two zero points before and after one cycle, so the error is present at the two zero points. The input and output of the circuit 7 represent two errors, which are processed with the output of the counter 2 by addition and subtraction to measure cycles with high accuracy.  
 IN - SASAKI MIKIO; SOBASHIMA AKIRA  
 PA - MATSUSHITA ELECTRIC IND CO LTD  
 IC - G01R23/10; H03D3/00; H03K9/04  
 © WPI / DERWENT

TI - Digital frequency measuring unit - has zero crossover detector, zero-point counter latch, arithmetic circuit and temporary-storage latch circuit NoAbstract  
 Dwg 1/3  
 PR - JP19860194378 19860820  
 PN - JP63228076 A 19880922 DW198844 007pp  
 PA - (MATU) MATSUSHITA ELEC IND CO LTD  
 IC - G01R23/10 ;H03D3/00 ;H03K9/04  
 OPD - 1986-08-20  
 AN - 1988-310986 [44]  
 © PAJ / JPO

PN - JP63228076 A 19880922  
 PD - 1988-09-22  
 AP - JP19860194378 19860820  
 IN - SASAKI MIKIO; others: 01  
 PA - MATSUSHITA ELECTRIC IND CO LTD  
 TI - DIGITAL PERIOD MEASURING INSTRUMENT  
 AB - PURPOSE: To accurately measure the period of a signal without increasing a sampling frequency by detecting the zero point of the signal in sampling cycle units, and calculating a frequency error by using amplitude values at two points on both sides of the zero point of the signal.  
 - CONSTITUTION: A zero-cross detector 1 detects the zero point of the signal in sampling cycle units and resets a counter 2, so the value of the counter 2 right before the resetting indicates the length between zero points of the signal, i.e. a cycle while the sampling cycle is regarded as 1. The cycles of the signal measured by the counter 2 are in sampling cycle units, so they have an error as compared with real

cycles and an error arithmetic circuit 3 calculates the error by using the amplitude values at the two points on both sides of the zero point, and a latch circuit 7 stores the error temporarily. There are two zero points before and after one cycle, so the error is present at the two zero points. The input and output of the circuit 7 represent two errors, which are processed with the output of the counter 2 by addition and subtraction to measure cycles with high accuracy.

I - G01R23/10 ;H03D3/00 ;H03K9/04